

Amendments to the Specification:

Please amend the specification as follows:

Please replace paragraph starting at page 1, line 14, paragraph number [0002] with the following rewritten paragraph:

[0002] Modern pulp and paper mills invariably have computerized control systems for monitoring and controlling the manufacture of moving webs of products, such as webs of paper or paperboard. In addition to ensuring that the paper and/or cardboard machines perform as desired and produce product of the appropriate quality, the control systems operate the machines as efficiently as possible. In order to ~~To~~ accomplish this, the controllers associated with each machine gather large volumes of data regarding performance of the machine and the quality of the paper product so that the data can be analyzed.

Please replace paragraph starting at page 2, line 22, paragraph number [0005] with the following rewritten paragraph:

[0005] Due to the time lag between when the measurements of the quality parameters are taken and the corresponding adjustments in machine operation are made, periodic variations having relatively long wavelengths (in the machine direction) will invariably result. However, additional and significant periodic variations in the quality variables can also result in the machine as well as cross-directions due to other factors such as temperature variations, pressure variations, finishing tolerances, and errors in the operation or adjustment of the machine. As a result, paper mills often run their machines at higher weights ~~targets~~ and lower moistures ~~targets~~ than requested by the customer to ensure that the lower tail of sampling distribution is above the specification limit. As problems with machines develop over time, however, the targets are often shifted further even away from the customer's specifications to compensate for poor machine operation, often without the mill being aware how much this shifted operation is costing in terms of additional materials, energy and lost production.

Please replace paragraph starting at page 3, line 18, paragraph number [0007] with the following rewritten paragraph:

[0007] Although modern control systems are capable of monitoring and recording numerous parameters associated with quality of the web product and operation of the machine, this data is only as useful as the tools used for analyzing it. For example, it is known in the art to manually download data from the data historian into a spreadsheet and to hand calculate the histogram of the basis weight and moisture values. Based on the rule of thumb that 50% of the process variation can be removed by a good control system, it has been possible in the past to estimate the potential savings in fiber and energy by reducing the basis weight target and increasing the moisture target. However, this process is manually intensive and, ~~moreover,~~ requires the services of a skilled technician to visually identify the variations that are potentially removable along with identifying the possible causes. As such, these calculations have heretofore been conducted only on an infrequent basis, such as when a machine is first commissioned or after a significant change has been made in machine operation.